(odds ratio: 7.45, p<0.0001). **CONCLUSIONS:** In this study of SCD patients a minority of patients accounted for a disproportionate share of IP+ED use. Frequently transfused patients without ICT had more IP+ED use than those with ICT. Identifying HUs can assist payers and providers in directing targeted interventions to deliver better care with lower costs.

PHS111
BLOOD PRESSURE TESTING AT COMMUNITY PHARMACIES PROMOTE BETTER HYPERTENSION MANAGEMENT
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OBJECTIVES: Hypertension increases the risk for heart disease and stroke and is a leading cause of death in the United States. In September 2011, the Department of Health and Human Services launched the Million Hearts® initiative to fight heart disease. To support this effort, a large pharmacy chain offered free blood pressure (BP) tests at thousands of locations nationwide. This study assesses the clinical impact of administering BP tests at these community pharmacies. **METHODS:** This retrospective, pre-post, cohort study included 123,427 self-reported hypertension patients, 18 years or older, who in 2012 received one or more BP tests at a Walgreens pharmacy. Tests are considered abnormal when BP>140/90. Outcome measures include BP test results and anti-hypertension medication use 12 months pre and 6 months post BP tests. Chi-square was used to determine significant differences between groups. **RESULTS:** 72,166 (58.47%) patients had abnormal test results. Patients without or non-adherent to anti-hypertensive medications (PDC<80) prior to testing were more likely to have abnormal test results; 60.02% of patients without anti-hypertensive medications and 61.36% of non-adherent patients compared with 55.76% of adherent patients had abnormal BP tests (P<0.0001). Patients with abnormal test results were more likely to add anti-hypertensive medications post testing; 10.17% of patients with abnormal results and only 6.27% with normal results added anti-hypertensive medications post testing (P<0.0001). Some patients in both groups discontinued medication. However, after testing, the abnormal BP patient group had 2.99% net increase (P<0.0001) and the normal BP patient group had 1.32% net decrease (P<0.0001) of anti-hypertensive medications users. **CONCLUSIONS:** BP testing at community pharmacies appears to improve appropriate utilization of anti-hypertensive medications. Patients reporting hypertension without anti-hypertensive medications and those non-adherent were more likely to have abnormal BP results. Abnormal results prompted patients to take anti-hypertensive medications. This public/private collaboration promoted better hypertension management and ultimately helped fight heart disease.

PHS112
MAIL ORDER PHARMACY USE AND ASSOCIATED HEALTH EXPENSES IN ADULTS WITH DIABETES
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OBJECTIVES: To identify predictors associated with mail order pharmacy use and investigate whether mail order pharmacy use produces cost savings for patients and payers in diabetes care. **METHODS:** We conducted a longitudinal cross sectional study covering the years 2006-2010 among Medical Expenditure Panel Survey (MEPS) household component participants who were 18 years or older, diagnosed with diabetes and took antidiabetic medications for treatment. The types of pharmacy from which the medications were purchased were measured, including mail-order and community pharmacies. Potential predictors such as socioeconomic and health-related variables associated with mail order use were identified using multivariable logistic regression. Annualized average health care expenses per patient including prescription drug and medical care expenses during the 2 year period were measured from patient and payer perspectives respectively. The associations between various health care expenses and pharmacy dispensing channels were assessed by multivariable linear regression. **RESULTS:** We identified a total of 3,668 eligible subjects in our study, representing more than 66 million individuals during 2006-2010 in the United States. Nearly 20% of the subjects filled at least 2 antidiabetic drug prescriptions via mail order pharmacies. The mail order pharmacy users were older, had high school or college degrees and higher incomes, and were more likely to be covered by private insurance. No significant difference in diabetes-related drug expenses paid by the patient themselves was found between mail order and community pharmacy users after adjustment. From the payer perspective, diabetes-related drug expenses and total health care expenses were 35% and 17% higher in mail order users, respectively. **CONCLUSIONS:** Besides pharmacy benefit design, socioeconomic status plays a role to influence patient preference of prescription drug dispensing channels in diabetes care, which may affect patient medication use behavior. Mail order use might not produce cost savings on diabetes-related medication use for patients and payers.

PHS113
EVALUATION OF A CHRONIC DISEASE MANAGEMENT SYSTEM FOR THE TREATMENT AND MANAGEMENT OF DIABETES IN PRIMARY HEALTH CARE PRACTICES IN ONTARIO
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OBJECTIVES: The objective was to measure the difference between optimal patient care and actual patient care in family practices before and after the introduction of a computer decision support chronic disease management system (CDMS) for diabetes. **METHODS:** This 1-year, prospective, observational, pre/post study evaluated the use of a CDMS with a diabetes patient registry and tracker in family practices in patient enrolment models. Aggregate group practice-level data from all rostered diabetes patients were analyzed. The primary outcome was the change in the proportion of patients with up-to-date "ABC" monitoring frequency (i.e., HbA1c, blood pressure, and cholesterol). Changes in practice care and treatment elements (e.g., retinopathy screening) were also determined. Usability and satisfaction with the CDMS were measured. **RESULTS:** Nine sites, 38 health care providers and 2,320 diabetes patients were included. The proportion of patients with up-to-date HbA1c (45%), cholesterol (38%), and ABC (12%) monitoring did not change. The proportion of patients with up-to-date blood pressure monitoring improved, from 16% to 20%. Data on foot examination, retinopathy screening, and use of angiotensin-converting enzyme inhibitors or angiotensin-receptor blockers were not available or not up-to-date at baseline for 98% of patients. By the end of the study, health care providers tended to be more negative towards the Usefulness, Training, Daily Practice, and Support domains of the CDMS, but there was a more positive response for the System, Using, Practice Planning, Satisfaction, and Learning domains. **CONCLUSIONS:** This real-world evaluation of a web-based CDMS for diabetes failed to impact physician practice due to limited use of the system.

PHS114
DETERMINANTS OF DENTAL CARE UTILIZATION IN ADULT DIABETIC POPULATION
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OBJECTIVES: Diabetes is known to increase the risk for dental and periodontal diseases such as severe periodontitis, gingivitis, xerostomia, dental abscesses, cavities and subsequent tooth loss. In order to prevent the oral health complications associated with diabetes, guidelines recommend the use of dental care services and regular screening at least once every six months. The objective of this study is to investigate the relationship among socio-demographic factors related to the use of dental services in adult diabetic population the United States. **METHODS:** We performed a cross sectional study using the 2010 Medical Expenditure Panel Survey (MEPS) database. All respondents above the age of 18 were used for the analyses. A two part linear regression model was built to analyze the self-reported use of any dental care services adjusting for various independent variables such as diagnosis of diabetes, age, race, sex, marital status, family income, years of education, and dental insurance status. All analyses incorporated person-level weights and variance adjustment weights (strata and primary sampling unit) provided by MEPS to produce nationally representative estimates. The level of statistical significance was P ≤.05 and all analyses were carried out using the statistical package, STATA IC version 10 (StataCorp, LP). **RESULTS:** Dental care service use was significantly lower in diabetic individuals (61%) compared to non-diabetic population (49%). Among those who visited a dentist, the annual number of visits was higher in diabetic population. Utilization was higher in whites, females, married individuals and in general increased with age. Low and middle income individuals were more likely to have no dental care visits compared to high income individuals. Having dental insurance also had a positive effect on the utilization. **CONCLUSIONS:** Dental care service utilization is higher among diabetics compared to the general population. However, there is lack of use of preventive services among this population.

PHS115
PREDICTORS OF PROSTATE CANCER SCREENING USING ANDERSEN'S BEHAVIORAL MODEL OF HEALTH SERVICES USE
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OBJECTIVES: To examine the prevalence and predictors of prostate cancer screening (PCS) in the United States using Andersen's Behavioral Model of Health Services Use (ABM). **METHODS:** We analyzed PCS rates in men (aged ≥ 40 years) from 2012 public use data files of the Behavioral Risk Factor Surveillance System. Descriptive analysis was conducted using sampling weights to determine the prevalence of PCS [i.e., had a prostate-specific antigen (PSA) test]. Multiple logistic regression, incorporating the sampling weights, within the framework of ABM was used to identify predictors of PCS, the dependent variable. The ABM variables of predisposing (e.g., age), enabling (e.g., insurance), and need (e.g., comorbidities) comprised the independent variables. **RESULTS:** Among the 129,923 men, 63.41% reported that they had a PSA test. Among all who had undergone PCS, most were married (42.63%) or white (52.81%), and about one-third (31.95%) had a college degree. More than half (55.93%) had been informed about the advantages of the PSA test from a health professional, while fewer (24.10%) were informed about its disadvantages. Among predisposing factors, age (OR = 1.08, 95% CI, 1.08-1.09), being single (OR = 0.78, 95% CI = 0.70-0.87), and being Black (OR = 1.17, 95% CI = 1.04-1.33) were significantly associated with undergoing PCS. Among enabling factors, higher income (≥$75,000) (OR = 2.44, 95% CI =2.08-2.86), and being self-employed (OR = 1.57, 95% CI=1.45-1.70) were significantly associated with undergoing PCS. Among need factors, undergoing PCS was significantly associated with those who have never smoked (OR = 1.77, 95% CI= 1.27-2.47). **CONCLUSIONS:** The majority of men had previously engaged in PCS. Several ABM variables were predictive of PCS and should be considered when developing future strategies to increase PCS in men aged 40 years and older.

PHS116
EIGHT YEARS OF NATIONAL HEALTH INSURANCE IN GHANA: EVALUATION OF THE HEALTH FINANCING SUB-FUNCTIONS
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OBJECTIVES: To evaluate the NHIS in terms of health financing sub-functions of revenue collection, risks pooling, and purchasing of health care using Ashiedu Keteke Mutual Health Insurance as a case study. **METHODS:** The review and participant observation methods were employed to analyze secondary data of the NHIS. A data compilation sheet was used to collect membership, revenue and expenditure data whilst reviews were conducted on NHIS website, annual reports,

Ministry of Health reports and other published literature. **RESULTS:** Out of 158,466 members who registered over the period under study (2005-2012), about 30% were active card-bearing members. The population coverage increased consistently from 6.4% in 2005 to 29.9% in 2012 with children below eighteen years of age as major membership driver, representing 42.2% of total membership. Membership is legally mandatory and household-based with children below eighteen years being automatically qualified when both parents are registered. The NHIS is largely tax-funded; extent of prepayment contributions declined over the study period from 20% to 15.4%. There is comprehensive one-for-all benefit package to ensure equity and adequate financial protection. The provider payment mechanism changed from fee-for-service in 2005 to Diagnostic Related Groupings (DRG) in 2008; although, fee-for-service is still used to pay for medicines supplied to insured members. In 2011, capitation payment was implemented for out-patient services at primary health centres. The administrative expenditure is relatively high; however, it declined over the study period from 42.1% in 2006 to 13.3% in 2012. **CONCLUSIONS:** The population coverage of the NHIS is increasing with a decreasing trend in administrative expenditure. Given that membership groups exempted from paying contributions represent more than fifty percent and extent of prepayment is declining, transfer of large scope of government subsidies would be necessary to ensure long-term financial viability.

PHS117

IMPACT OF HEALTH PLAN DESIGN AND KEY CHARACTERISTICS ON THE CHOICE OF CONTRACEPTIVE METHOD INITIATED AMONG WOMEN IN AN INTEGRATED HEALTH PLAN

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OBJECTIVES: Kaiser Permanente, Northern California integrated health plan (KPNC) offers non-deductible and deductible plans. This study examined whether having deductible vs. non-deductible plans impacts the types of contraceptives initiated, including long-acting reversible contraception (LARC) methods (intrauterine device, subdermal contraceptive implant), among women enrolled in KPNC plans. **METHODS:** Women aged 15-44 years who initiated a new contraceptive method in 2010 were identified from KPNC electronic databases. Key characteristics, including age, race/ethnicity, marital status, income, comorbidity status, and type of contraceptive method initiated, were determined and compared among women with deductible plans vs. those with non-deductible plans. Multivariable logistic regression analysis was utilized to identify characteristics associated with initiation of LARC methods. **RESULTS:** Of the overall study population, 9,062 eligible women had deductible plans and 59,877 had non-deductible plans. More women with non-deductible plans initiated highly effective methods (LARC, permanent contraception) compared with deductible plans (17.4% vs. 16.5%, p<0.0001). However, the frequency of LARC method initiation was 14.3% for both study groups and unaffected by plan type. After multivariable regression adjustment, the results were consistent, in that plan type did not influence initiation of a LARC method (deductible vs. non-deductible, odds ratio (OR): 0.97, p=0.36). Characteristics that influenced LARC method initiation included age, with women ≥40 years having greater odds (OR: 1.15, p<0.0001) and those ≤29 years having lesser odds than those aged 30-39 years for initiating LARC. Additionally, Hispanics vs. non-Hispanic whites (OR:1.10, p=0.0013), a <$50,000 income (OR: 1.08, p=0.001), having evidence of a comorbidity (OR: 1.30, p<0.0001), and having a health savings account (HSA) (OR: 1.16, p=0.0301) were associated with greater odds of initiating LARC methods. **CONCLUSIONS:** Among women enrolled in KPNC, the frequency of LARC method initiation was high, primarily influenced by factors including age, race/ethnicity, income level, and comorbidities, rather than differences in deductible versus non-deductible plans.

PHS118

MANAGEMENT OF HYPERTENSION IN DIABETICS BY PRIMARY CARE PHYSICIANS AND PREFERENCE OF ANTI-HYPERTENSIVE DRUGS

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OBJECTIVES: Primary care physicians (PCP's) are required to manage blood pressure (BP) below ≤130/80 mmHg among hypertensive diabetics. First-line anti-hypertensive drugs like ACE inhibitors/ARBs are preferred primary drugs in hypertensive diabetics as per guidelines. Thus the study examined hypertension management in diabetics, by maintaining BP ≤130/80 mmHg, among PCPs and anti-hypertensive drug preference among diabetics. **METHODS:** A cross-sectional study analysis on 2009-2010 National Ambulatory Medical Care Survey was (NAMCS) conducted. A bivariate chi-square analysis conducted between groups. Propensity score adjusted multiple logistic regression was conducted to examine which PCP is appropriately maintaining hypertension among diabetics. A Multinomial logistic regression analysis conducted to examine which drug is preferred among hypertensive diabetic patients. **RESULTS:** 45.66% of patient visits had BP ≤130/80 mmHg. No difference in hypertension management in diabetic visits among PCP's. There are 143% higher odds of prescribing diuretics compared to ACE inhibitors/ARBs among African American patient visits (OR: 2.438, 95%CI 1.360-4.369) as compared to Whites. Patient visits in Northeast region as compared to Midwest region has 65.5% (OR: 0.345, 95%CI: 0.154-0.771) lesser odds of receiving diuretic as compared to ACE inhibitors/ARBs. Unit increase in comorbidity index increases 63% odds of receiving beta-blockers (OR: 1.631, 95%CI: 1.092-2.436) and 59.9% odds of receiving diuretics prescription (OR: 1.599, 95%CI: 1.108-2.307) compared to ACE inhibitors/ARBs. **CONCLUSIONS:** BP managed in less than half diabetic patient visits. PCP's equally manage BP among hypertensive diabetics. Comorbidities should be managed well in order to manage hypertension in diabetics. African Americans are rightly prescribed diuretics compared to ACE inhibitors/ARBs as per the Seventh Report of the Joint National Committee (JNC7) guideline. As comorbidities increase, prescription of ACE inhibitors/ARBs decrease.

PHS119

PROVISION OF CULTURAL COMPETENCY TRAINING IN THE NATIONAL HOME AND HOSPICE CARE SURVEY: THE ROLE OF ORGANIZATIONAL AND LEADERSHIP FACTORS

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OBJECTIVES: To examine the role of organizational and leadership factors on cultural competency training (CCT) in home health and hospice care (HHH) agencies. **METHODS:** This observational study used data from the agency component of the 2007 Home and Hospice Care Survey (NHHCS). The final analytic sample had 828 agencies representing 12,107 HHH agencies when weighted. A summary CCT composite score was created based on three items supported by factor analyses (range= 0-3; alpha= 0.6): whether the agency provided mandatory training to understand cultural differences/beliefs that may affect delivery of services (referred to as CCT) to all administrative, clerical, and management staff; all direct service providers; and all volunteers. Institutional and resource dependency theories were used to predict associations between 12 organizational/leadership factors and CCT. Descriptive, correlational, and ordinal logit regression analyses were conducted, accounting for the complex sampling design/using finite population correction. Weighted estimates were obtained for the overall sample and subpopulations: home health (HH), hospice, and mixed agencies. **RESULTS:** HH, hospice, and mixed agencies comprised 75%, 15% and 10% of the sample, respectively. The overall mean CCT score was 1.7 (95%CI= 1.6-1.9). Regression results showed that JCAHO accreditation increased CCT odds in HH (OR= 2.1, 95%CI= 1.0-4.2) and hospice (OR= 4.4, 95%CI= 2.1-9.4) settings. Medical/social services increased CCT odds in HH (OR= 1.4, 95%CI=1.0-2.0) and hospice (OR=1.5, 95%CI=1.0-2.1) settings. Additionally, in HH, teaching status increased CCT odds (OR=2.7, 95%CI=1.2-6.2). In the hospice setting, formal contracts with outside organizations increased CCT odds (OR=4.0, 95%CI= 1.8-9.0), and non-for-profit status decreased CCT odds (OR=0.2; 95%CI=0.1-0.5). Administrator's tenure increased CCT odds in the mixed setting only (OR=1.1; 95%CI= 1.0-1.1). **CONCLUSIONS:** This study demonstrated the influence of organizational and leadership factors on CCT. HHH agencies need to increase their cultural competency practices to more effectively mitigate health disparities in this important community-based setting.

PHS120

AN EXAMINATION OF DISPARITY IN ACCESS TO MENTAL HEALTH SERVICES AMONG PEOPLE LIVING WITH HUMAN IMMUNODEFICIENCY VIRUS (HIV) AND CO-MORBID DEPRESSION IN ONTARIO

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OBJECTIVES: Depression is a common co-morbidity among people living with HIV. However, many HIV+ individuals are not diagnosed or not treated, which may result in poor HIV treatment outcomes and increased health care costs. We aimed to describe barriers and gaps in accessing mental health services among this high-need population in Ontario. **METHODS:** A retrospective cohort study was conducted from 2008-2012 by linking the Ontario HIV Treatment Network(OHTN) Cohort Study(N=3,545) with administrative health databases. Co-morbid depression was identified based on the Center for Epidemiologic Studies Depression Scale(Scores>=20) or the Kessler Psychological Distress Scale(Scores>=23). The use of primary and specialty mental health services was measured during the 12 months followed by the assessment of depression at the baseline. Logistic and negative binominal regression models were constructed to examine associations between predisposing, enabling, and need factors and the use and the intensity of the use of mental health services. **RESULTS:** 950(27%) were identified with co-morbid depression at the baseline. 523(55%) and 444(47%) had used the primary care and specialist care respectively during a year after they identified with co-morbid depression. Mean number of visits to primary and specialist mental health services were:6(SD=16) and 8(SD=18). For those who were depressed, we found that non-English speakers were two times less likely to use primary(aOR:0.5;95%CI:0.3-0.8) and mental health specialist(aOR:0.6;95%CI:0.4-0.9) services when compared to their English speaking counterparts. In addition, those who were identified as homosexual/gay, having annual income<$20,000 or residing in rural area were two times less likely to use mental health specialist care. For accessing primary and specialist care, we found that ethnic minorities or being homosexual/gay were likely to have 40-50% few encounters to care. **CONCLUSIONS:** Careful considerations with the impacts of language barriers, geographic restrictions, and cultural differences would be important to address in delivering successful mental health care for this high-need population in Ontario.

PHS121

IMPACT OF STATE CHILD AND ADOLESCENT PSYCHIATRIC WORKFORCE ON CAREGIVER REPORTED DIFFICULTY ACCESSING SERVICES FOR CHILDREN WITH MENTAL HEALTH CARE NEEDS

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OBJECTIVES: To examine the impact of state child and adolescent psychiatrists (CAP) workforce on caregiver reported difficulty accessing services for their child aged 3-17 years with any of these mental health conditions: autism spectrum disorder, cerebral palsy, Down syndrome, developmental delay, mental retardation, ADHD, anxiety, behavioral/conduct problems, or depression. **METHODS:** A